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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,129	02/10/2004	David R. Hall	66.0049	2128

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EXAMINER

THOMPSON, KENNETH L

ART UNIT PAPER NUMBER

3672

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/708,129

Applicant(s)

HALL ET AL.

Examiner

Kenn Thompson

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 26-35 is/are allowed.
- 6) ☒ Claim(s) 11,12,14-20,23 and 25 is/are rejected.
- 7) ☒ Claim(s) 13,21,22 and 24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/04; 4/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the channel breaking into the central bore substantially perpendicular as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because additional information such as the title of the invention should not appear on the abstract page. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 12, 14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Denison, U.S. 4,126,848.

Regarding claims 11, 12 and 17, Denison discloses a primary (fig 3, radial wall of enlarged bore adjacent 31) secondary (edge at 30) shoulder, a central bore (inner bore of 12), an angled channel (31) extending from the secondary shoulder to the central bore, an open channel (32) from the central bore to the angled channel (31), such that the angled channel (31) and the open channel (32) merge to form a continuous channel.

As to claim 14, Denison discloses the angled channel (31) does not exit into the central bore (inner bore of 12).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3672

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 11, 15, 16, 18-20, 23 and 25 are rejected under 35 U.S.C. 102(a) as being anticipated by Boyle et al., U.S. 6,641,434.

Regarding claim 11, Boyle et al. discloses in figure 14 a primary (transition wall or shoulder located axially between smaller inner diameter portion at 532 and larger inner diameter portion at 511) secondary (551) shoulder, a central bore (512), a channel (554) extending from the secondary shoulder to the central bore, an open channel (col. 12, lines 25-26) from the central bore to the channel (554), such that the angled channel and the open channel merge to form a continuous channel.

As to claim 15, Boyle et al. disclose the channel (554) breaks into the central bore (512, at secondary shoulder) at a non-perpendicular angle.

AS to claims 16 and 25, as best understood by the Examiner, Boyle disclose the channel (544) breaks into the central bore (512) substantially per-pendicularly (with respect to a radial plane of the joint).

Regarding claims 18-20, Boyle et al. discloses in figure 14 increasing the inside diameter of a portion of the central bore (within 511 at 514) to provide a first portion (at 532) having a standard diameter, and a second portion (at 511) having an enlarged diameter, and gun-drilling a channel (554; col. 12, lines 25-28) through the tool wall from the secondary shoulder (551) to an exit point within the second portion.

As to claim 23, Boyle et al. discloses the channel breaking into the central bore at a non-perpendicular angle (col. 12, lines 25-26).

Allowable Subject Matter

Claims 1-10 and 26-35 are allowed.

Claims 13, 21, 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest all the claimed subject matter including the method of forming the second channel from within the central bore.

The prior art of record does not disclose or suggest all the claimed subject matter including the angle being in the range of 0.25 to 15 degrees.

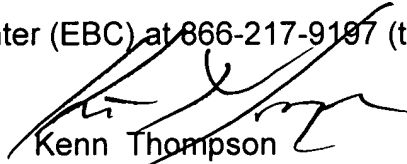
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenn Thompson whose telephone number is 571 272-7037. The examiner can normally be reached on 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

26 September 2005



Kenn Thompson
Primary Examiner
Art Unit 3672